

State of California
The Resources Agency
Department of Water Resources
Northern District

RECREATION USE SURVEY OF
LITTLE LAST CHANCE CREEK, PLUMAS COUNTY

2000

Technical Information Record ND-01-2

prepared by

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This report was prepared to summarize information collected under SAP Cost Center 100493 to document streamside recreation and fishing use of Little Last Chance Creek below Frenchman Lake. This report has received only limited review; it is intended for internal use and should be considered preliminary and subject to revision.

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SUMMARY

A recreation use survey of Little Last Chance Creek in Plumas County was conducted during 2000 to estimate the amounts and types of streamside recreation use and angler success. Similar surveys were conducted at Little Last Chance Creek in 1996, 1992, and 1988.

A stratified random sampling procedure was used to sample five miles of Little Last Chance Creek, from Frenchman Dam downstream to the Guidici Ranch Road. Interviews of recreationists, roving use counts, and a creel census were combined to gather information on recreation activities, visitor origin, and angler success.

There were an estimated 74,000 hours of day-use recreation on Little Last Chance Creek between April 29 and November 15, 2000. The most frequently observed activities were camping, fishing, relaxing, walking, sightseeing and bicycle riding. More than three-quarters of the observed use occurred at Chilcoot Campground. Anglers creeled an estimated 600 rainbow trout (0.13 trout per hour) and 270 brown trout (0.06 trout per hour) in 4,500 hours of fishing. Anglers also reported they caught, or caught and released an additional 2,300 trout. The mean length of angler-caught rainbow trout was 28.2 cm and 27.8 cm for brown trout.

A majority of recreational visitors to Little Last Chance Creek came from out-of-State (about 79 percent). Visitors also came from 20 California counties, but only 5 percent of visitors were from "local" Northeast Counties. The places of residence for anglers differed slightly from those of recreational visitors. About 66 percent of anglers came from Nevada, while 12 percent came from California's Northeast Counties and 7 percent came from the San Francisco Bay Area.

INTRODUCTION

Frenchman Dam was built in 1961, by the Department of Water Resources, as part of the State Water Project (Figure 1). Its purpose was to regulate Little Last Chance Creek for irrigation in Sierra Valley and to enhance local recreation opportunities (DWR 1957). The downstream release was intended to maintain (but not enhance) the stream fishery. Reservoir releases are regulated to supply downstream water rights and water contracts.

This report describes the fourth recreation use survey of Little Last Chance Creek conducted since Frenchman Dam was built. The purpose of this survey was (1) to estimate the amounts and types of recreation use and angler success occurring along the creek with augmented flow from Frenchman Reservoir, (2) to document the recovery of the creek's fishery since a rotenone treatment and a drought, (3) to compare use with that observed during earlier surveys (Brown 1989; Elkins 1997; Elkins 1998), and (4) to provide additional baseline information prior to implementation of a proposed revision of non-irrigation season minimum flows.

Using a stratified random sampling procedure, the survey combined roving use counts with interviews of recreationists in order to gather information on recreation activities, visitor origin, and angler success. Estimates of use were made for the period of April 29, 2000 to November 15, 2000 (the 2000 Sierra District stream trout-fishing season). This report describes the recreation use survey, creel census, and results. A separate report, prepared by the Department of Fish and Game (DFG), Contract Services Section (Brown 2000), describes a fish population survey conducted in October 2000.

An earlier version of this report was distributed in May 2001. This version corrects several errors in the creel census data and several other minor errors.

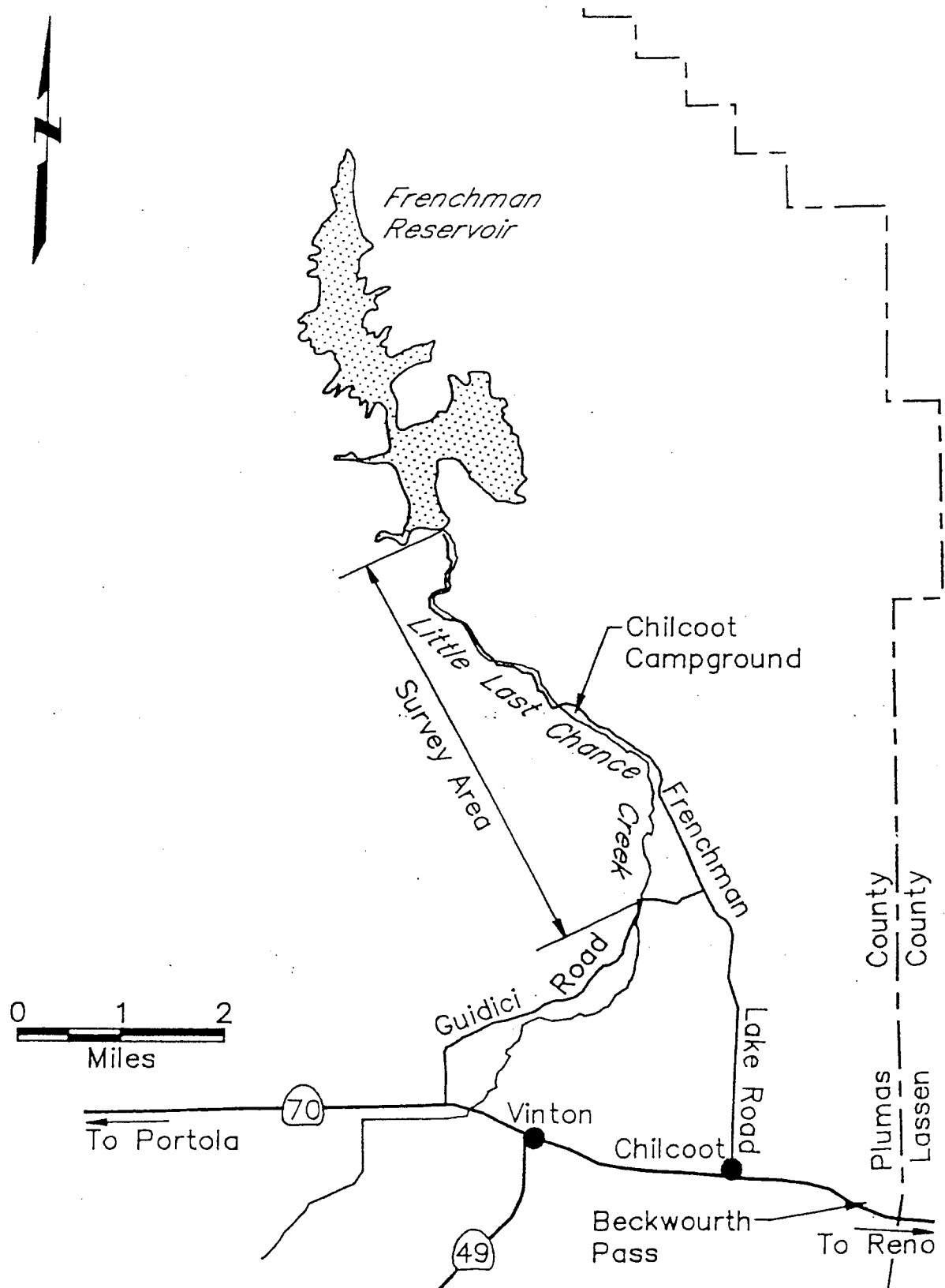


Figure 1 — Frenchman Reservoir and Little Last Chance Creek, Plumas County

DESCRIPTION OF STUDY AREA

Little Last Chance Creek is a headwater tributary of the Middle Fork Feather River, flowing into and out of Frenchman Lake. Below Frenchman Dam, Little Last Chance Creek winds through a steep, lava-rock canyon for about four miles, and then flows through the sagebrush country of northern Sierra Valley. Average annual runoff from the watershed upstream from the dam (81 sq. mi.) is about 28,000 acre-feet. The survey area included about five miles of Little Last Chance Creek from Frenchman Dam (elevation 5,500 feet) downstream to the Guidici Ranch Road (elevation 5,000 feet).

Frenchman Lake Road (State Route 284) closely follows the creek and provides easy access to it and to camping facilities in Chilcoot Campground, operated by a concessionaire of the U. S. Forest Service. Chilcoot Campground is located about 3 miles downstream from Frenchman Dam and offers 40 campsites (35 drive-in and 5 walk-in), potable water, and restroom facilities in an attractive riparian setting. It is the only developed (and legal) camping area on the creek.

During late spring and summer, streamflows in Little Last Chance Creek below Frenchman Dam fluctuate widely depending on the available water supply and irrigation demands in the Sierra Valley. In 2000, Frenchman Lake did not fill and thus no spill occurred. During the stream fishing season, regulated flows in Little Last Chance Creek normally varied between 12-70 cfs. In the fall, flow was as low as 2 cfs for more than two weeks.

Frenchman Lake was chemically treated by the California Department of Fish and Game to eradicate northern pike in the spring of 1991. During this project virtually all of Little Last Chance Creek below the dam was poisoned as well. The Department of Fish and Game later restocked the creek with rainbow and brown trout in an effort to restore the fishery. During subsequent electroshocking studies, DWR and DFG determined that the recovery of the fishery was delayed for several years by drought (DWR 1998).

METHODS

Recreation Use Counts

Use counts were made on randomly selected dates within nine survey strata using the optimum allocation method described by Abramson and Tolladay (1959). Twenty-nine days of the 201-day period from April 29 through November 15, 2000 (the Sierra District stream trout season) were surveyed. Five 1-hour counts of recreation use were made in the study area each survey day at regular periods, scheduled according to the number of daylight hours (Appendices I and II).

The surveys were made from vehicle or on foot, as necessary, to check access and recreation sites. Recreationists (and their vehicles) were counted and recorded by recreation activity. The five daily counts were totaled and multiplied by factors that accounted for recreation use in the daylight periods not counted. Similarly, the resulting daily figures were expanded to estimate total recreation hours for all days in each stratum. Adding the stratum totals provided an estimate of day-use recreation hours for the study period.

Creel Census and Recreation Interviews

In the hours between use counts, recreation and angler success data were collected through personal interviews. Interviews were conducted on a per-vehicle basis. Length of stay was rounded to whole hours for day users, and nights of stay for overnight users. The activities recreationists intended to participate in during their stay, and their county of residence, were also recorded.

Anglers along Little Last Chance Creek were contacted during 26 of the 29 recreation surveys to determine fishing success (during three of the recreation surveys no anglers were available for interview). The county of residence and length of time spent fishing so far that day (rounded to the nearest quarter-hour) were recorded for each angler

contacted. Fish censused were counted, measured (fork length to nearest 0.5 centimeter [cm]), and identified to species. To determine total catch, the average catch per hour (derived from the creel census) was multiplied by estimated total hours of fishing for each stratum.

RESULTS

Recreation Use

Total recreation use on Little Last Chance Creek below Frenchman Reservoir was estimated at 74,000 recreation hours ($\pm 14,000$ hours) for the period April 29 to November 15, 2000. With adjustments to account for the high proportion of overnight use, this is about 10,000 recreation days, or 8,000 "12-hour visitor days". Based on counts of recreationists, camping and fishing were the major activities, followed by sightseeing, walking, relaxing, bicycle riding, and a variety of miscellaneous activities (Table 1). Nearly 80 percent of the observed use occurred at Chilcoot Campground. Use counts reflect what people were doing when we counted them, and the approximate number of hours spent on each major activity. They do not provide data on other activities that people pursued at other times during their stay.

Table 1
Recreation Hours by Activity
Little Last Chance Creek, 2000

Activity	Recreation Hours	Percent
Camping	57,000	78
Fishing	4,500	6
Sightseeing	4,300	6
Walking	3,800	5
Miscellaneous*	2,000	3
Relaxing	1,400	2
Bicycle Riding	1,000	1
Total	74,000	100

* Miscellaneous category includes undefined activities (700 hours), picnicking (650), children playing (350), swimming/wading/beach use (100), outdoor games (100) and photography/painting (100).

Interviews conducted during the 201-day survey period totaled 233, representing 616 people. The interviews provided more detailed information on activity participation and visitor characteristics. Interviews of campers at Chilcoot Campground numbered 138 and represented 384 people. Day-use interviews numbered 88 and represented 208 people. The average number of visitors per vehicle was 2.64.

About 89 percent of the people interviewed said they were "just relaxing", and 51 percent stated that they had or planned to fish in the creek during their stay. Thirty percent did some sightseeing along the creek, about 22 percent said they "walked for pleasure", and about 21 percent waded or swam in the creek. Twelve percent picnicked somewhere on the creek, and about 8 percent engaged in various types of "beach use". Nearly 4 percent of those interviewed rode bikes or motorcycles along the creek. These percentages total more than 200 percent because most people engaged in more than one activity during their visit.

Sixty-two percent (384) of the visitors interviewed camped overnight at Chilcoot Campground. The average length of stay (harmonic mean) was about two nights (1.98). Thirty-five percent (214) of the visitors interviewed used the stream corridor for day use, and returned home that night. About three percent (18) of the visitors stayed overnight somewhere in the general area. The average length (harmonic mean) of day-use visits was 2.89 hours.

Among those who stayed overnight in the area, a few camped at Frenchman Reservoir or stayed at a local motel or resort, while the rest stayed with friends or relatives, or had other accommodations. The average length of stay for those who stayed in the area was about 3.3 nights.

Among the groups camping at Chilcoot Campground, 63 percent said they used tents as their overnight accommodations. Twenty-nine percent used travel trailers, 14 percent used a motorhome, van, or bus, 7 percent used tent trailers, 3 percent used

pickup campers, and 2 percent slept out. These percentages total more than 100 percent because many people camp with more than one type of equipment.

Most recreational visitors (79 percent) to Little Last Chance Creek came from Nevada (mostly Reno, Sparks, and Carson City). Visitors also came from 20 California counties, with the highest percentage (4 percent) from Plumas County (Figure 2). Of those visitors camping at Chilcoot Campground, 83 percent came from Nevada, with 11 California counties represented among the remaining 17 percent. Seventy-four percent of the day users came from Nevada.

Creel Census Data and Angler Success

Two hundred and sixty-two anglers were censused. They had fished a total of 477 hours and creeled 67 rainbow and 49 brown trout. One hundred and fifty-one other trout were also reported caught, or reported caught and then released back into the creek. Observed catch per hour (excluding fish caught and released) for individual anglers ranged from zero to 2.5. About 82 percent of the anglers fished with bait, 21 percent with lures, and 24 percent with flies. These totals add up to more than 100 percent because 27 percent of the anglers tried more than one type of terminal gear.

Total fishing use was estimated at 4,500 hours ($\pm 1,000$ hours) or about 2,000 angler-days, with an estimated catch of 600 rainbow trout (0.13 trout per hour) and 270 brown trout (0.06 trout per hour). Based on the number of fish anglers reported catching, or reported catching and releasing, as many as 2,300 additional trout may have been caught and/or caught and released. Including all fish caught, reported caught, or reported caught and released, angler success was about 0.7 fish per hour. We censused about 11 percent of the estimated hours of fishing use.

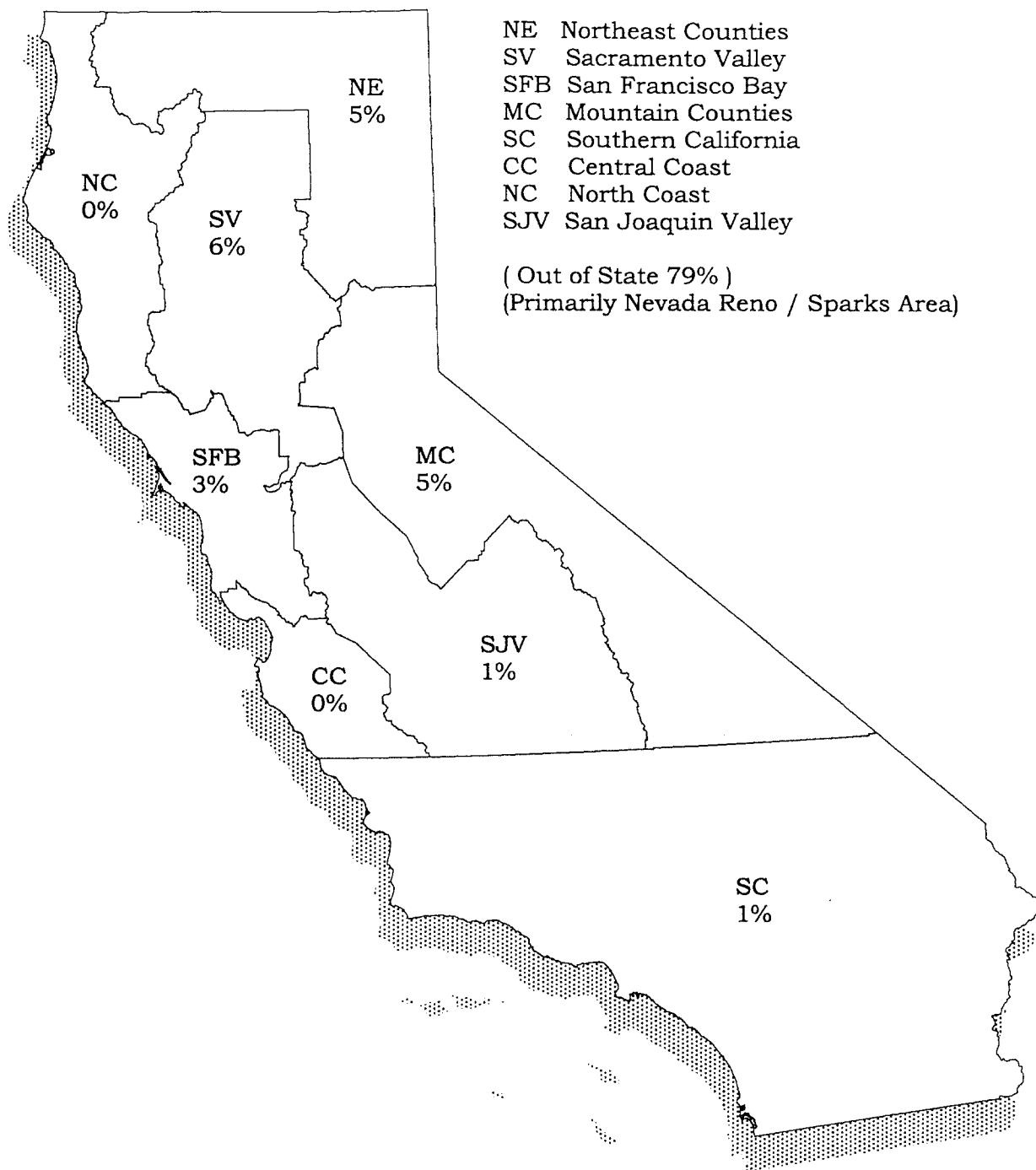


Figure 2 - Little Last Chance Creek Visitor Origin by County Groups, 2000

The mean fork length of 66 measured rainbow trout was 28.2 cm (11.1 inches) and 27.8 cm (10.9 in) for 49 brown trout (Appendices III and IV). The largest rainbow trout observed was 39.5 cm fork length (15.6 in), and the largest brown trout was 47.5 cm fork length (18.7 in).

The origin of anglers at Little Last Chance Creek was slightly different than that of the general recreationists. About 66 percent were from Nevada. Residents of Plumas County made up 11 percent, while 7 percent came from the San Francisco Bay Area (Figure 3). Twenty-two California counties were represented in the creel census.

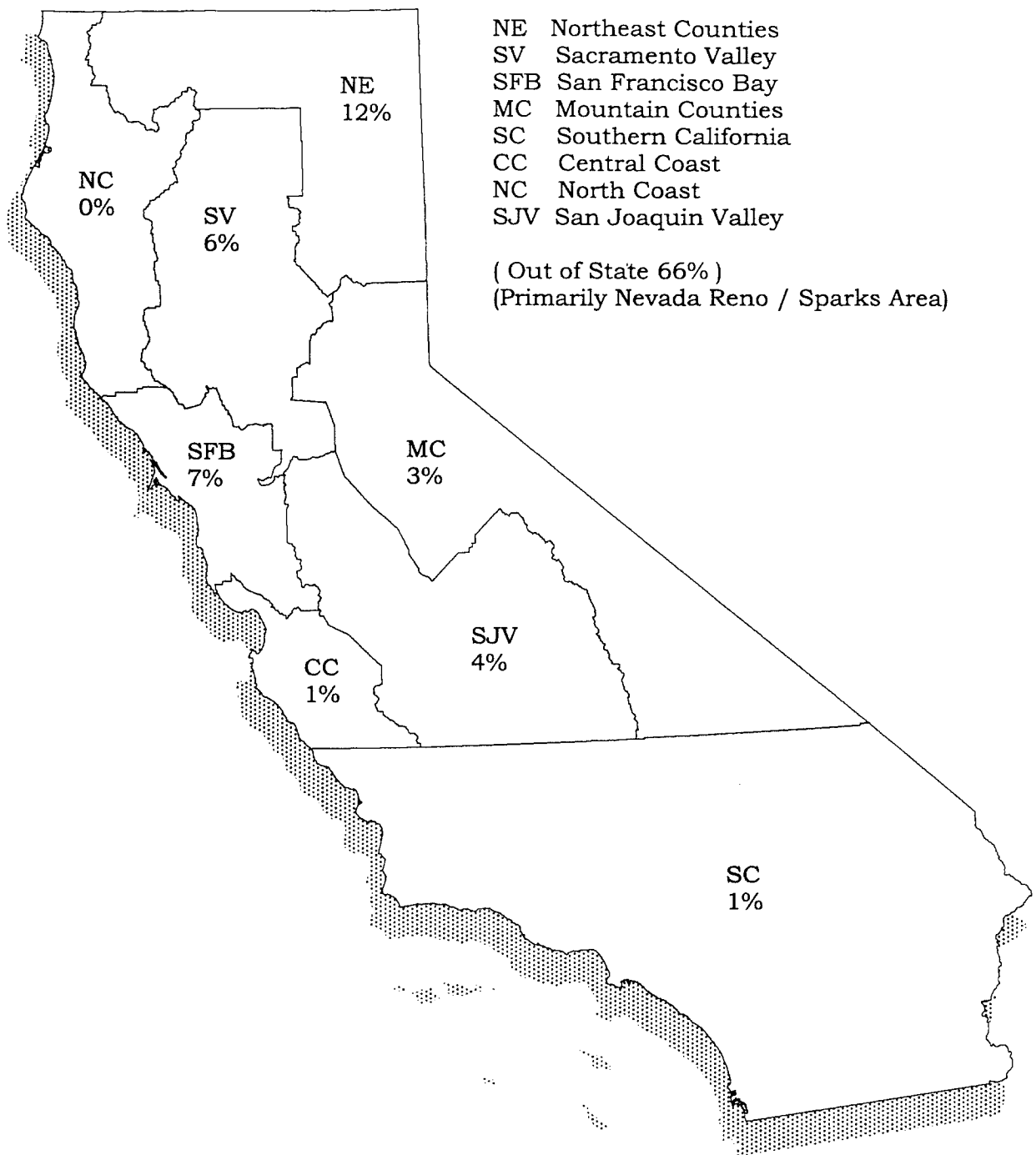


Figure 3 - Little Last Chance Creek Angler Origin by County Groups, 2000

DISCUSSION

Recent recreation surveys that DWR conducted at Big Grizzly Creek (Elkins 1999b) and Indian Creek (Nicholas 2000) showed that a larger proportion of visitors to these creeks were from the Northeast Counties (34 and 40 percent, respectively), generally Plumas County. However, the relatively lower proportions of Northeast County visitors (5 percent) and anglers (12 percent) observed in this survey are almost identical to the proportions observed in the previous (1996) Little Last Chance Creek survey (Elkins 1998).

Understanding the limitations of the recreation survey and the creel census helps put the data obtained in the proper perspective. The following sections describe the survey limitations, compare results with those reported from earlier surveys, and compare estimates of recreation use at Frenchman Reservoir and Little Last Chance Creek with the forecasts that were made when the project was planned more than 40 years ago.

Limitations of Use Counts and Creel Census

Most recreationists using the creek were easily observed during the use counts. Most vehicles along Little Last Chance Creek can be associated with recreationists, ranchers, or U.S. Forest Service workers. However, people were not found for some vehicles during the use count periods. Some difficulty was encountered when making use counts at Chilcoot Campground, because not everyone there was always visible. Some people may have been temporarily out of sight during use count periods; perhaps inside travel trailers, restrooms, or other locations not visible to the surveyor.

In general, much of the recreation use at Chilcoot Campground was not directly related to Little Last Chance Creek. To a large degree, the campground is a place to "get away and relax" for residents of the greater Reno/Sparks urban area. Still, most individuals interviewed indicated that they visited the creek at least once during their stay.

Comparison of 2000 Survey Results with Earlier Surveys

Total stream recreation use in 2000 was lower than the last survey in 1996, but still higher than in 1992 (Table 2). Use in 2000 was affected by the season-long three-bridge construction project between Chilcoot Campground and Frenchman Dam. This construction made it difficult for anglers and others to access traditional roadside areas: many were occupied by equipment or construction materials. Frequent traffic delays (15 to 30 minutes) also probably discouraged creek visitors. These impacts are reflected in diminished day use activities within the total, otherwise obscured by increased campground use. The primary access route to the campground was unaffected by these delays.

Table 2

Comparison of Recreation Hours by Activity at Little Last Chance Creek 1988 - 2000

Activity	Recreation Hours - 1988	Recreation Hours - 1992	Recreation Hours - 1996	Recreation Hours - 2000
Camping	46,000	46,000	58,000	57,000
Relaxing	45,000*	10,600*	4,500	1,400
Fishing	7,400	3,500	7,000	4,500
Wading/Swimming	3,700	2,600	1,000	100
Sightseeing	2,900	1,500	1,500	4,300
Walking	2,200	1,300	3,000	3,800
Miscellaneous	5,800	4,500	7,000	2,900
Total	113,000	70,000	82,000	74,000

* These numbers reflect the methodology used in 1988 and 1992. Many of these hours can be attributed to camping based on the methodology used now.

Similarly, angler use and estimated catch for 2000 was lower than in 1996, but higher than 1992. Rainbow trout and brown trout were seen in the creel in 1996 and 2000, but

in 1992 only rainbow trout were observed. There are several factors that could explain why brown trout were absent that year. Although both species were restocked after the rotenone poisoning in 1991, unusually low stream flows in fall of 1991 may have affected their persistence. Also, only rainbows were planted in 1992.

In contrast, from 1995 through 1999, the Little Last Chance Creek fishery benefited from the spill of Frenchman Lake for the first times in a decade (DWR 1998). Many large rainbow trout are known to emigrate from the reservoir during such a spill and are a popular attraction for anglers early in the season. These large rainbow trout were obvious in the creel census for the first month of the 1996 stream fishing season, and with reproducing populations of both species thriving (Brown 1999), rainbow trout were also reasonably abundant (though of smaller size) even without spill in 2000. In 1999 and 2000, only fingerling trout (both species) were planted (R. Decoto, personal communication, 2001). Two other species of fish are also known to occur in Little Last Chance Creek: Sacramento sucker (Catostomus occidentalis) and Lahontan redbside (Rhinichthys osculus).

Comparison of Survey Results with Previous Estimates

In general, recreation use at the Upper Feather River lakes (Antelope, Davis, and Frenchman) has far exceeded the estimates made when these projects were planned (DWR 1974; DWR 1989). For example, the cumulative total use at Frenchman Lake from 1962 through 2000 is over 9 million recreation days. The planning estimates for the same period are only about half that total. Thus, the actual use to date has approximately doubled the predicted use.

Since Frenchman Lake was not operated specifically for downstream fishery and recreation purposes, the lower reaches of Little Last Chance Creek were expected to provide poor angling and associated recreation under post-project conditions (DWR 1957). Consequently, stream recreation use was expected to be minimal. The loss of recreation potential here was expected to be replaced by the increased stream

recreation potential provided by the Indian Creek Project (Antelope Lake, and the then proposed, but still unbuilt Abbey Bridge and Dixie Refuge Reservoirs). However, Little Last Chance Creek has proven to be a significant recreation and fishery resource. The construction of Chilcoot Campground (about 1970) has provided a facility for people who prefer to camp or picnic there rather than at Frenchman Lake. The stream fishery has proved to be better than expected, considering the relatively erratic flow releases required to meet irrigation needs. Table 3 compares the general recreation benefits of Little Last Chance Creek with those recently observed at two other local streams enhanced by State Water Project reservoirs.

Table 3

Comparison of General Recreation, Fishing Use, and Angling Quality on Little Last Chance Creek and Other Local SWP Facilities

	2000 LLC Creek	1999 Indian Creek	1997 Big Grizzly Creek
Recreation Use (Hours)	74,000	19,000	5,000
Fishing Use (Hours)	4,500	4,500	1,300
Angling Quality (trout creeled per hour)	0.19	0.37	0.16

- Estimates for Little Last Chance Creek from Pages 9-11 of this report and based on 5.2 miles of stream.
- Estimates for Indian Creek from Nicholas (2000; TIR ND-00-1) and based on 11.1 miles of stream.
- Estimates for Big Grizzly Creek from Elkins (1999a; TIR ND-99-1) and based on 4.25 miles of stream.

Planning estimates of recreation use at Frenchman Lake and Little Last Chance Creek with and without the project area summarized in Table 4. Estimates of Little Last Chance Creek use without the project included use of the several miles of stream now inundated by the reservoir.

Table 4
Estimated and Actual Recreation Use of Frenchman Lake and
Little Last Chance Creek (in recreation days)

Year	Frenchman Reservoir		Little Last Chance Creek	
	Estimated Use	Actual Use	Estimated Use	Actual Use
1962	32,000	30,000	1,400	Unknown
1963	61,000	105,000	1,500	Unknown
1970	100,000	397,000	2,000	Unknown
1975	114,000*	148,000	2,500*	Unknown
1980	127,000	188,000	3,000	Unknown
1985	136,000*	289,000	4,000*	Unknown
1988	142,000*	230,000	4,600	18,000
1990	146,000	240,000	5,000	Unknown
1992	150,000*	300,000	5,200*	14,000
1996	156,000*	223,000	5,600*	13,000
2000	167,000	156,000	6,000	10,000

* Interpolated figures.

Sources:

- Frenchman Reservoir and Little Last Chance Creek estimated use from DWR (1968). Little Last Chance Creek estimates represent streamside recreation use without the project. Streamside use with the project was expected to be minimal.
- Frenchman Reservoir actual use, 1962 through 1996, from DWR (1989) and subsequent updated data. Actual use from 2000 estimated by U.S. Forest Service, Beckwourth Ranger District.
- Little Last Chance Creek actual use from Page 9 of this report.

ACKNOWLEDGMENTS

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REFERENCES

- Abramson, Norman and Joyce Tolladay. 1959. "The Use of Probability Sampling for Estimating Annual Number of Angler days". California Department of Fish and Game. 45 (4):303-311.
- Brown, Charles. 1999. "The Recovery of Trout in Little Last Chance Creek, Plumas County, Following an Application of Rotenone in 1991". California Department of Fish and Game. 27 pp.
- Brown, Julie. 1989. "Recreation Use Survey of Little Last Chance Creek, Plumas County, 1988". Northern District Technical Information Report No. 89-1. Department of Water Resources. 20 pp.
- Decoto, Ron. 2001. Personal Communication. Department of Fish and Game District Biologist, Lake Almanor, Plumas County.
- Department of Water Resources. 1957. "Investigation of Upper Feather River Basin Development". Bulletin No. 59. (Interim Report on Engineering, Economic, and Financial Feasibility of Initial Units). 135 pp. plus Appendixes A-D.
- _____. 1968. "Allocations of Costs Among Purposes of the California State Water Project". Bulletin 153-68. 66 pp. plus Appendixes A-D.
- _____. 1974. "Survey of Recreation Potentials, Upper Feather River Basin". Central District Report. 42 pp. plus Appendix A.
- _____. 1989. "Recreation Facilities of the State Water Project: An Inventory". Central District Report. 62 pp.
- _____. 1998. "Contribution of Frenchman Lake Spill to the Fishery of Little Last Chance Creek." Northern District Report. 52 pp. Plus Appendixes.
- Elkins, David. 1997. "Recreation Use Survey of Little Last Chance Creek, Plumas County, 1992". Northern District Technical Information Report No. 97-2. Department of Water Resources. 22 pp.
- _____. 1998. "Recreation Use Survey of Little Last Chance Creek, Plumas County, 1996". Northern District Technical Information Report No. 98-1. Department of Water Resources. 25 pp.
- _____. 1999a. "Recreation Use Survey of Big Grizzly Creek, Plumas County, 1997". Northern District Technical Information Report No. 99-1. Department of Water Resources. 21 pp.
- _____. 1999b. "Recreation Use Survey of Big Grizzly Creek, Plumas County, 1998". Northern District Technical Information Report No. 99-2. Department of Water Resources. 19 pp.
- Nicholas, Jacob. 2000. "Recreation Use Survey of Indian Creek, Plumas County, 1999". Northern District Technical Information Report No. 00-1. Department of Water Resources. 19 pp.

Appendix I

Recreation Survey Schedule for Little Last Chance Creek

April 29, 2000 to November 15, 2000

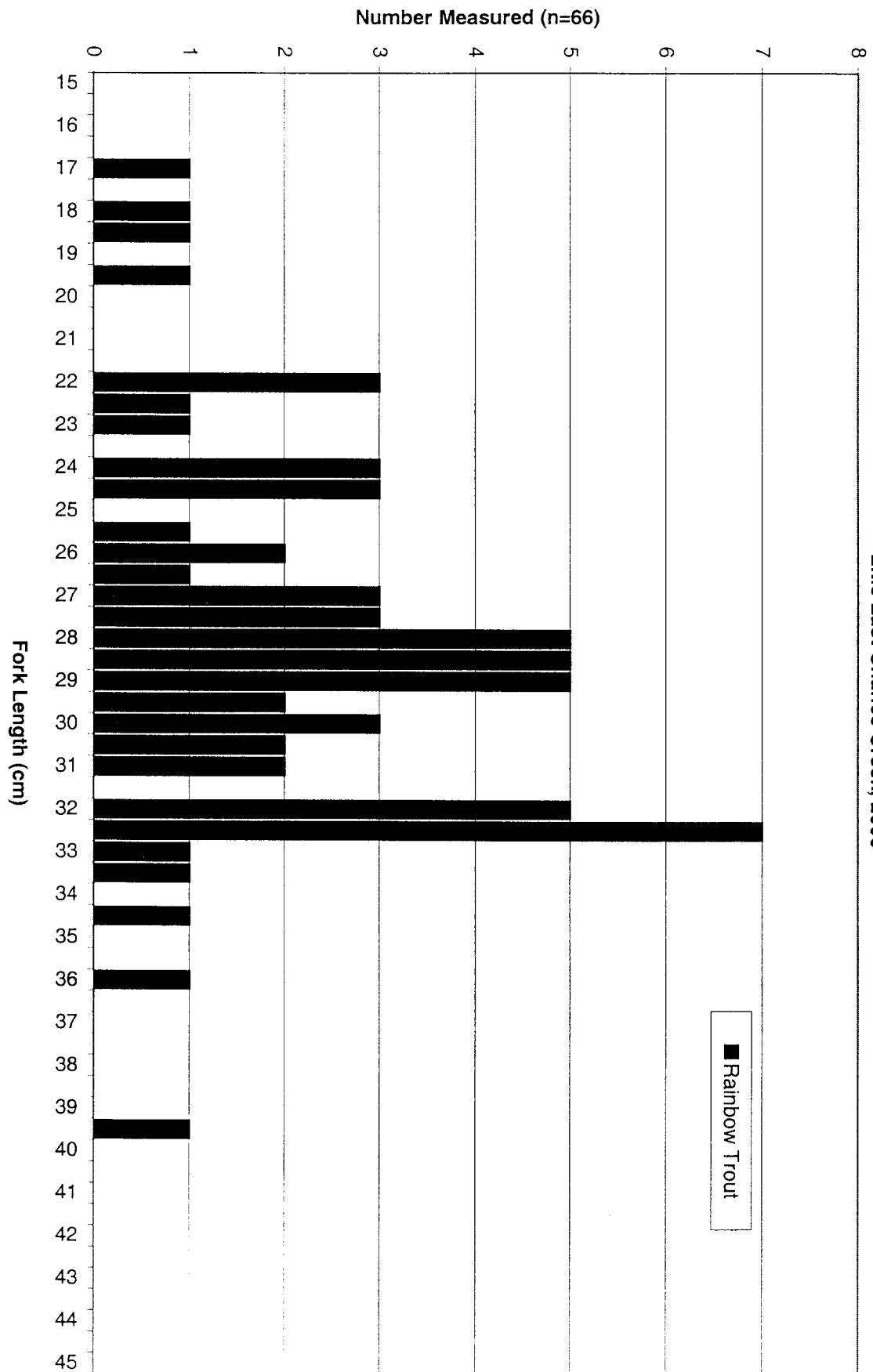
Date	Holiday Period (HD) Normal Weekend (WE) Normal Weekday (ED)	Survey Stratum
April 29 April 30	WE WE	I I
May 13 May 14 May 28 May 29	WE WE HD HD	III III II II
June 1 June 4 June 15 June 23 June 24 June 29	WD WE WD WD WE WD	IV III IV IV III IV
July 3 July 5 July 9 July 22 July 31	HD WD WE WE WD	IX VI V V VI
August 2 August 4 August 5 August 19	WD WD WE WE	VI VI V V
September 2 September 4 September 8 September 23 September 24	HD HD WD WE WE	IX IX VIII VII VII
October 1 October 20 October 30	WE WD WD	VII VIII VIII

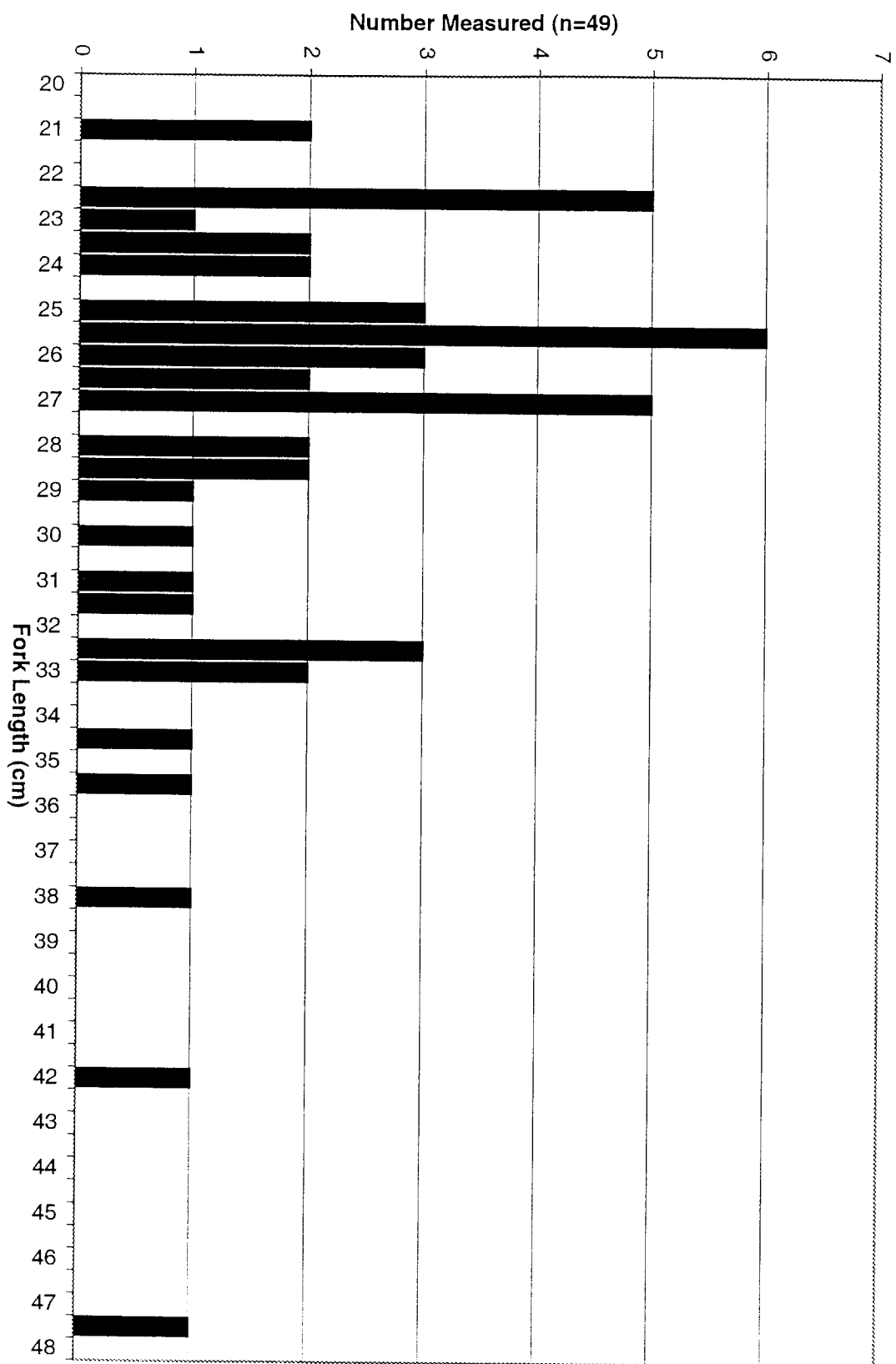
Appendix II

2000 Use Count Schedule for Little Last Chance Creek

Date	Daylight Hours	Use Counts		Creel Census Time (approx.)
		Count	Time	
April PDT	15-1/2	1st	0730-0830	0800-1200 1500-1900
		2nd	1000-1100	
		3rd	1300-1400	
		4th	1530-1630	
		5th	1830-1930	
May-August PDT	16-1/2	1st	0700-0800	0800-1300 1400-1900
		2nd	1000-1100	
		3rd	1300-1400	
		4th	1600-1700	
		5 th	1900-2000	
September PDT	14	1st	0730-0830	0830-1230 1330-1730
		2nd	1000-1100	
		3rd	1230-1330	
		4th	1500-1600	
		5th	1730-1830	
October PDT	13	1st	0800-0900	0900-1230 1300-1700
		2nd	1000-1100	
		3rd	1230-1330	
		4th	1500-1600	
		5th	1700-1800	
November PST	12	1st	0730-0830	0800-1200 1300-1700
		2nd	0930-1030	
		3rd	1130-1230	
		4th	1330-1430	
		5th	1530-1630	

APPENDIX III
Length-Frequency of Censused Rainbow Trout
Little Last Chance Creek, 2000





APPENDIX IV
Length-Frequency of Censused Brown Trout
Little Last Chance Creek, 2000